Ameritech Illinois Plan of Record

I. OVERVIEW

A. Introduction

SBC's four regions: Ameritech, Pacific Bell/Nevada Bell (PB/NB), Southwestern Bell Telephone (SWBT) and Southern New England Telephone (SNET) currently make available a wide variety of Operational Support Systems (OSS) and interfaces to CLECs. For example, Ameritech Illinois' existing OSS interfaces for pre-ordering, ordering, provisioning, maintenance and repair, and billing have been in use since 1996 and are being used by a wide variety of CLECs to a significant extent.

This Plan of Record (POR) is the initial step of a three-phase process to achieve OSS system integration in a manner consistent with the conditions of the Illinois Commerce Commission (ICC) approval of the SBC/Ameritech merger.

Each of SBC's regions have most of the same functions and data elements, however, there are differences from region to region. To mitigate the complexity caused by this lack of OSS uniformity, SBC/Ameritech offered a number of OSS commitments designed (a) to create a comprehensive plan of integration for the Ameritech and SBC OSS processes; (b) to subject that plan to a collaborative process that will incorporate CLEC input into how OSS is made available; and (c) to make the SBC/Ameritech OSS process available on an integrated basis throughout the post-merger SBC/Ameritech states. This document is designed to provide a comprehensive analysis and plan for a specific process for integrating these OSS systems and to ensure that this integration process will not have an adverse impact on competition in Illinois.

This plan is separate and distinct from the upcoming POR being issued in response to the Federal Communications Commission (FCC) requirements pertaining to uniform and enhanced OSS as set forth in the SBC/Ameritech merger conditions approved in the Memorandum of Understanding and Order, released on October 8, 1999 (SBC/Ameritech Merger Conditions). However, this Plan is consistent with all state and federal conditions and stipulations governing the SBC/Ameritech merger as related to OSS interfaces.

~~Deliverables outlined in the OSS POR for Pre-ordering and Ordering of xDSL and Other Advanced Services filed previously at the FCC, and are specific to Ameritech Illinois, will be detailed in this plan. Future and on-going Competitive Local Exchange Carrier (CLEC) collaborative efforts, such as xDSL workshops, could impact the specific deliverables and timeline of this plan.~~

B. Scope

The focus of this POR defines a plan for Ameritech Illinois to make available modified OSS, in accordance with the schedule and commitments outlined in the ICC conditions for the SBC/Ameritech merger. These OSS include commercially ready, application to application interfaces and graphical user interfaces (GUIs) which support pre-ordering, ordering, provisioning, maintenance and repair and billing for resold services, individual Unbundled Network Elements (UNEs), and combinations of UNEs. While most of these interfaces are existing and currently in use, some additional GUI access to these OSS functions will be provided as a result as this plan.

The commitment to provide direct access to SBC's SORD, or the equivalent service order processing system in the SNET and Ameritech states, as specified in ¶28 of the ICC SBC/Ameritech Merger

Conditions, is based on an actual CLEC request specifying the functionality desired. An assessment of this area will be not be addressed in this document, but will be made following an actual CLEC request defining the scope of these projects.

This plan will detail the Present Method of Operation (PMO) for pre-ordering, ordering, provisioning, maintenance and repair, and billing across all four regions of SBC. The Future Method of Operation (FMO) will identify the changes and milestones associated with the OSS processes and interfaces available to CLECs doing business with Ameritech Illinois.

C. Process Methodology

This POR follows the framework established by the SBC/Ameritech Pre-Merger "OSS Process Improvement Plan" and contains an analysis of the current operating environment, identified differences within the SBC operating regions, conclusions regarding the operating environment in Ameritech Illinois and a deployment plan for the changes necessary to achieve the future environment.

The following steps were taken to create this plan:

- Subject matter experts were assembled from various OSS business requirement areas and from Information Technology system and architecture areas.
- The PMO was documented for pre-ordering, ordering, provisioning, maintenance and repair and billing processes and interfaces.
- The FMO interfaces and processes for pre-ordering, ordering, provisioning, maintenance and repair, and billing were identified and documented.
- An FMO implementation plan documenting the appropriate process and interface changes and associated timelines was documented.

The criteria for determining the future method of operation included, but was not limited to:

- Business requirements, including the number of actual current users, the volumes currently processed, the flow-through capability that already exists as well as the expected number of users and requests (i.e., future capacity requirements).

- Industry standards or guidelines, such as those published by T1, the Ordering and Billing Forum (OBF) and Telecommunications Industry Forum (TCIF).

- Downstream impacts of any changes, such as the effect that changes in the applications would have on methods and procedures.

- CLEC input, including the types of change requests CLECs are initiating, the discussions in change management meetings regarding developmental plans, CLEC specific feedback from the account teams, other OSS support personnel, training classes and CLEC forums.

- The architecture of Ameritech Illinois' current OSS, including available data and functionality.

- The current security methods including firewalls, addresses, passwords, and where and how CLECs gain access.

SBC will follow the three-phase process identified in the ICC conditions for the SBC/Ameritech merger. Once this POR is filed, SBC will work collaboratively with CLECs and the ICC Staff to obtain written agreement on OSS interfaces, enhancements and business requirements identified in this POR and ultimately develop and deploy those agreed upon changes.

Standards

Industry standards and guidelines provide for both business rule functionality and data field format and structure. Ameritech Illinois provides its CLEC customers with application to application electronic interfaces that are based on industry standards. In some instances Ameritech Illinois has deployed interfaces in advance of final standards, and this may have resulted in slight differences between Ameritech's interface and the final published industry standard. For example, Ameritech Illinois' EDI 5 ordering interface (Ameritech Illinois is currently on EDI 7 for ordering) provided the ability to add a directory listing to an order even though it was not available in the standards until EDI 8. Many of the functionalities that are currently being introduced into the standards and guidelines have been available on the Ameritech Illinois interface for years. Because of Ameritech's commitment to standards, it actively participates in standard bodies, and is supportive of the timely implementation of the standards and guidelines issued by these bodies

There are multiple bodies involved in the setting of standards and guidelines for the OSS interfaces used for communication between ILECs and CLECs.. The industry-recognized bodies that issue standards and guidelines applicable to the interfaces used in the pre-ordering and ordering of resold local service and unbundled network elements are the Forums and committees are sponsored by the Alliance for Telecommunications Industry Solutions (ATIS) and include the Ordering and Billing Forum (OBF), the Telecommunications Industry Forum EDI Service Order Standards Committee (SOSC), the Telecommunications Industry Forum Electronic Communications Implementation Committee (ECIC), and the T1M1 committee.. The OBF issues guidelines covering the pre-ordering and ordering transaction flows and associated data elements, the SOSC provides the guidelines for the implementation of those transactions in EDI, and T1M1 the implementation of pre-ordering transactions in CORBA.

Currently, the OBF is developing version 5 of its Local Services Ordering Guide (LSOG 5), which is targeted for release in final form on July 26, 2000. The SOSC is expected to release version 5 of the EDI Electronic Local Mechanization Specifications (ELMS 5) on October 30, 2000, dependent on the release by the OBF of LSOG 5. Version 4 (LSOG 4) was released by OBF on April 9, 1999. T1M1 has issued two standards applicable to pre-ordering via CORBA: T1.265-1999 approved April 1999, and T1.267-1999 approved August 1999.

ATIS committees also provide standards and guidelines applicable to the repair and maintenance, and billing functional areas. The T1M1 committee has issued two standards governing the data elements and operation of the repair and maintenance interface: T1.227a-1999 and T1.228-1995. Ameritech Illinois application to application interface currently adheres to T1.227a-1998 and T1.228-1995. The OBF Message

Processing Committee maintains the Exchange Message Interface guideline. Version 17 of this guideline was issued in January 2000. Issue 9 of the EDI billing guideline, maintained by the TCIF EDI committee and built upon the ANSI X.12, version 004010 EDI standard, was published in December 1998. Telcordia's Carrier Access Billing System (CABS) Billing Output Specifications (BOS) for Bill Data Tape (BDT), version 32, were published in April 1999 and is the version currently being supported in Ameritech Illinois.

Ameritech Illinois is committed to implementing systems that conform to industry standards and guidelines. Ameritech Illinois will introduce an updated version of the current EDI pre-ordering application-to-application interface in March 2001. This update will be consistent with the OBF LSOG 4. An update of the EDI ordering application to application interface from LSOG 2 to LSOG 4 is planned for deployment in August 2000 and represents a scheduled enhancement that was underway prior to the SBC/Ameritech merger efforts. CLECs are participating in this effort through the existing Ameritech Illinois Change Management Process (CMP). Similarly, the repair and maintenance and billing interfaces, and planned enhancements to these interfaces, are based on appropriate industry standards and guidelines as detailed in the Future Method of Operation (FMO) section of this document.

In this document, Ameritech Illinois is committing to implementing the most current versions of standards available in the industry today. Because of the evolving nature of industry standards, Ameritech Illinois will work with the CLECs through the CMP to determine the timeline for implementation of future versions of the industry standards. The CMP will also be used to determine the appropriate implementation of the selected standards versions, because a strict adherence to the standard might result in loss of existing functionality and because of the flexibility of implementation allowed within the standards and guidelines.

Change Management

Ameritech has had a regional Change Management Process (CMP) in place since June 1999. This CMP was developed collaboratively with CLECs over an 18-month period. The CMP provides a means by which Ameritech Illinois and the CLECs can work cooperatively to introduce changes to the OSS interfaces. The process includes specific intervals, such as when release specifications will be delivered to the CLECs for review and input. Ameritech Illinois is committed to using the CMP to deliver the changes identified in the POR.

A 13-state CMP is currently being addressed in a separate CLEC collaborative effort that began in November 1999 following the SBC/Ameritech merger close. The 13-state CMP is expected to be approved by the CLECs in March 2000. This Change Management Process, in its current draft form, is detailed in the attached document (see Attachment A). Once implemented as described in the CMP transition plan, Ameritech Illinois will use this process in lieu of the current regional process.

Ameritech Illinois agrees there is a need for a process that addresses business process changes that fall outside the scope of the CMP. Ameritech Illinois is committed to putting in place a process by April 2000, by which these changes can be addressed, including the establishment of the CLEC User Forum. Until these forums are established, Ameritech Illinois will address these changes in the existing Ameritech user forums.

The 13-state CMP will provide the CLEC with the opportunity to test all changes in a test environment before Ameritech Illinois introduces those changes into the production environment. As part

of the implementation of the 13-state CMP, Ameritech Illinois has also agreed to provide a versioned, production-like test environment that will include processing of ordering transactions through its service order negotiation system.

Third Party Testing

Ameritech Illinois will accommodate staff and the 3rd party tester direction by testing those systems and processes that the Commission and the 3rd party tester deem necessary. Ameritech Illinois will also accommodate staff and the 3rd party tester request for information and Ameritech Illinois subject matter expert. Ameritech Illinois feels that the leadership of the commission staff is critical to the success of the third party test and that the commission staff should act as a mediator for all issues that surface during the test. We also encourage the Commission to retain an experienced third party as soon as possible to provide both the Commission and the staff with assistance during remaining phases. Ameritech Illinois will provide the necessary resources and will assure that every effort is put forth to assure that the resulting test will be successful.

Ameritech understands the meaning of "New York" style testing to mean that the test should be comprehensive, "military style," and independent and blind. Ameritech recommends a comprehensive third-party test that includes the following three areas of inquiry:

-Performance measurement evaluation, which would include a review of the rules, methods and procedures, statistical methodology, measurement implementation compliance, and data integrity and timeliness.

-OSS-related business process and support procedures review, which would include CLEC OSS training and interface development, help desk support for OSS interfaces, change management and capacity management.

-Functionality and capacity testing, which could include end-to-end functionality testing on certain interfaces, as determined by the Commission, and capacity testing for pre-ordering, ordering and maintenance and repair functions.

A military style test, or "test until you pass" approach, means that if a issue is encountered during a test, the third party tester will inform the Commission and Ameritech of the issue and provide an assessment of required remedial actions. Ameritech will either clarify the issue or provide a remedy. If the remedy requires a change to a process, system or document, the third party test will retest or reevaluate as appropriate. If the problem is not resolved, the cycle will be repeated until a solution is reached, no further action is warranted, or the Commission specially exempts the issue from further action.

Finally, to the greatest extent possible, the test should be both independent and blind. The independent tester will report to the Commission, not Ameritech. Although it is virtually impossible for the transaction to be truly blind, the tester should institute procedures to ensure that it does not receive preferential treatment.

II. PRESENT METHODS OF OPERATION (PMO)

There are similarities between the pre-ordering, ordering, provisioning, maintenance and repair, and billing functions offered by each SBC region. The following ~~analyses~~analysis detail the functional business processes and interfaces, specifically comparing Ameritech Illinois with Pacific Bell/Nevada Bell (PB/NB), Southwestern Bell Telephone (SWBT) and Southern New England Telephone (SNET).

There are differences in central issues to each functional area, e.g. standard data elements for maintenance, and functional alignment to standards for pre-ordering. These differences will be described for each functional area.

A. Pre-ordering

Available Interfaces

The Southwestern Bell Telephone (SWBT), Pacific Bell/Nevada Bell (PB/NB), Ameritech and Southern New England Telephone (SNET) regions provide CLECs with application to application access to pre-ordering functions via ~~electronic data interchange~~Electronic Data Interchange (EDI), which has been selected by the Ordering and Billing Forum (OBF) as one of the methods for exchanging information between telecommunications companies regarding orders for local service. SWBT and PB/NB also provide application to application pre-ordering functions via Common Object Request Broker Architecture (CORBA).
~~(CORBA) is a second interface used by SWBT and PB/NB toprovide application to application pre-ordering functions.~~

CORBA became an ECIC approved Industry Guideline for local service pre-ordering in September 1997. This approval provided two industry acceptable transport protocols for local pre-ordering, CORBA and EDI. CORBA was accepted as an alternative due to its fundamental ability to support interactive data exchange. CORBA is defined by the Object Management Group (OMG) and uses Interface Definition Language (IDL) data models as defined by the T1M1 committee of the Alliance for Telecommunications Industry Solutions (ATIS). The CORBA interface employs request-response message flows to exchange data between a message requestor and provider.

SWBT and PB/NB have implemented EDI pre-ordering functions based on the Ordering and Billing Forum (OBF) Local Service Ordering Guidelines (LSOG) version 4, Telecommunications Industry Forum (TCIF) Electronic Data Interchange Local Mechanization Specification (ELMS) issue 4, and EDI ASC X12 version 4010. Ameritech and SNET EDI pre-ordering interfaces were implemented prior to acceptance of industry guidelines, and utilize ASC X12 version 3072.

SWBT and PB/NB have also implemented CORBA pre-ordering functions based on the OBF LSOG version 4, ANSI T1.265-1999. SNET has not made a CORBA-based pre-ordering interface available to CLECs.

Ameritech Illinois has made the EDI pre-ordering interface available for local service pre-ordering and does not currently support a CORBA-based pre-ordering interface.

In addition to the application to application interface using EDI/CORBA, the SWBT and PB/NB regions also provide pre-ordering functions via DataGate. DataGate is a proprietary application to application interface implemented prior to the acceptance of industry guidelines.

Graphical User Interface (GUI) access to pre-ordering functions is provided to CLECs in the SWBT and PB/NB regions via the Verigate ~~application.~~interface . SNET provides GUI access to pre-ordering functions via W-CIWin.

Ameritech Illinois provides GUI access to pre-ordering functionality via TCNet.

The following table summarizes the pre-ordering interfaces currently available in the SBC operating regions.

Pre-Ordering	SWBT	PB/NB	SNET	Ameritech
Industry App to App Gateway				
Application Name	EDI/CORBA	EDI/CORBA	MSAP	EDI
LSOG Version	4	4	NA	NA
Protocol / Version	EDI 9 / 4010	EDI 9 / 4010	EDI / 3072	EDI / 3072
~~Protocol / Version~~	~~CORBA / T1.265-1999~~	~~CORBA /T1.265-1999~~		
Protocol / Version	CORBA / T1.265-1999, T1.267-1999	CORBA /T1.265-1999, T1.267-1999		
Proprietary App to App Gateway				
Application Name	DataGate	DataGate		
Proprietary GUIs				
Application Name	Verigate	Verigate	W-CIWin	TCNet

EDI Message Flows

The current application to application interfaces utilize ASC X12 transaction sets to pass EDI access information between requestor (CLEC) and provider (SWBT, PB/NB, Ameritech or SNET).

The SWBT, PB/NB and SNET regions utilize the 850, 855, and 997 transaction sets. A typical pre-ordering transaction begins when a CLEC submits an 850 transaction. When the 850 is received, a 997 transaction is immediately returned to the CLEC to communicate the receipt of the request. Responses, whether positive or negative, are returned to the CLEC via an 855 transaction. The CLEC may return a 997 transaction to communicate the receipt or rejection of the 855.

Ameritech Illinois utilizes the 850, 855, and 864 transaction sets. A typical pre-ordering transaction begins with the receipt of an 850 transaction from a CLEC. A 997 transaction is not used to communicate receipt of the 850. Responses, whether positive or negative, are returned to the CLEC via an 855 transaction or an 864 transaction. The 864 transaction is used to return Customer Service Information (CSI) to the CLEC. Ameritech Illinois does not require a CLEC to return a 997 transaction.

Functions

Pre-ordering functions allow for the exchange of certain information between Ameritech Illinois and CLECs for the purposes of submitting accurate requests for local service. This exchange of information is performed based on an inquiry and response process. The following pre-ordering functions are each used in one or more SBC regions.

Address Validation Inquiry
This function is used to verify an end user address provided by the requesting CLEC, and is performed to ensure subsequent local service requests contain a valid address.

This function is available in the SWBT and PB/NB regions via the EDI/CORBA, DataGate and Verigate interfaces. Similarly, address validation is performed in the SNET region via the application to application interface and W-CIWin. In the SWBT and PB/NB regions, working telephone number (WTN) may also be used to retrieve a valid residential service address. In addition to the address validation information, supplemental information is returned in each operating region such as tax area codes and the primary NXX of the local service office. This information varies by operating region because it does not equally reside in the regional backend OSS that is performing the address validation function.

Ameritech Illinois provides this function via the application to application interface and TCNet.

Common Language Location Indicator (CLLI) Inquiry
This function provides the CLLI code associated with a telephone number, and is used to determine the appropriate CLLI submitted on a local service request for port or loop with port service.

This function is available in the SWBT region via the DataGate and Verigate interfaces. In the PB/NB region, this same information is provided with the information provided via the Feature/Service Availability function via DataGate and Verigate. This function is not supported in the SNET region.

This function is not supported in Ameritech Illinois. CLLI information is provide by Ameritech Illinois to CLECs manually.

Connecting Facility Assignment (CFA) Inquiry
This function retrieves a list of channel assignments, design-related information and work authorization information for leased DS1 and DS3 facilities. This inquiry provides data used to verify the status of a connecting facility prior to submitting this information on a local service request.

In the SWBT and PB/NB regions, this function is available via the DataGate and Verigate interfaces. This transaction is not supported in the SNET region.

This transaction is not supported in Ameritech Illinois, and no request has been made of Ameritech Illinois to provide this capability.

Customer Service Information Inquiry
This function retrieves current end user service records. The information provided on the CSI is used to verify existing features and services prior to the submission of a local service request.

In the SWBT and PB/NB regions, the Customer Service Information function allows for retrieval of records by either account telephone number (ATN) or individual working telephone number (WTN), and is

available via the EDI/CORBA, DataGate and Verigate interfaces. In the SNET region, this function only supports retrieval using account telephone number via the application to application interface and W-CIWin.

In SWBT region, responses are provided for accounts of up to 5,000 working lines on the application to application interfaces, and for up to 1000 working lines on the GUI. PB/NB provides responses for accounts containing up to 4 megabytes of data, and SNET up to 128 kilobytes of data. Requests for customer service records exceeding these parameters must be submitted to the local service centers for fulfillment.

In the SWBT, PB/NB, and SNET regions, CLECs may retrieve Resale CSI when the end user account is owned by another CLEC.

In Ameritech Illinois, this inquiry may also be performed by either account or working telephone number, and is available through the application to application interface and TCNet. In Ameritech Illinois, responses are provided for accounts up to 20,000 display lines. Requests for customer service records exceeding these parameters must be submitted to the local service centers for fulfillment. Ameritech Illinois does not permit CLECs to view CSI when it is owned by another CLEC.

Data Validation Files

The exchange of information from some of the functionality listed is based on relatively static data. As a result, Data Validation Files are available for the purpose of providing requesting CLECs with an alternate method of acquiring pre-ordering information.

Street Address Guide, PIC/LPIC Codes and Feature/Service availability information is available via File Transfer Protocol (FTP) in the SWBT and PB/NB regions. Access to PIC/LPIC codes and product availability files can also be arranged via Connect:Direct. SNET provides a file containing valid directory yellow page headings downloaded from the CLEC web site.

In Ameritech Illinois, files containing directory names, class of service codes, USOC, community names, yellow page headings, feature/service availability, street address guides, and PIC/LPIC codes are available via Connect:Direct, CD-ROM and TCNet.

Digital Subscriber Loop Pre-qualification Inquiry

This function provides an indication of theoretical loop length and indication of local serving office locations where SBC has deployed ADSL.

In the SWBT and PB/NB regions, this function is available via the DataGate and Verigate interfaces. Also provided in the SWBT region is theoretical 26-gauge loop length and taper code information. This function is not available in the SNET region.

This function is not available in Ameritech Illinois.

Digital Subscriber Loop Qualification Inquiry

This function provides specific, detailed loop make-up information for a loop to a specific address and provides information necessary to determine the suitability of that loop for xDSL services.

In all SBC regions, including~~in~~ Ameritech Illinois, loop qualification is a manual process using fax and/or E-mail.

Directory Listing Inquiry
This function is used to retrieve directory listing information associated with an end user telephone account.

~~This function is available in the SWBT region via the EDI/CORBA application to application interface.~~
The SNET region~~also~~ provides this function via the application to application interface and W-CIWin. This information is available as part of the Customer Service Information function via the EDI/CORBA and DataGate application to application interfaces and the Verigate interface in the SWBT and PB/NB regions.

In Ameritech Illinois, directory listings are available as part of the Customer Service Information function via the application to application interface and TCNet.

Dispatch Inquiry
This function indicates when the dispatch of an SBC technician is required for residential service ordered on a local service request. Dispatch is based on the existence of cut-through facilities and assists the CLEC in determining the due date that may be quoted to the end user.

This function in the SWBT and PB/NB regions is available via the EDI/CORBA, DataGate and Verigate interfaces. In the SNET region, this information is provided as part of the Address Validation function.

In Ameritech Illinois, this information is provided as part of the Due Date Inquiry function.

Due Date Inquiry
This function allows for the identification of available premise visit dates for services to be ordered on a local service request.

In the SWBT and PB/NB regions, this inquiry is available via the EDI/CORBA, DataGate and Verigate interfaces. In the SNET region, the inquiry function is available via the EDI interface and W-CIWin.

All regions return the next available due date. In addition to that date, twenty-seven alternate dates are returned in the SWBT region, and four alternate dates are returned in the SNET region. No alternate dates are returned in the PB/NB region. In the SNET region, a standard interval appropriate to basic local service is returned for non-dispatch orders.

In Ameritech Illinois, inquiry, reservation, confirmation and cancellation functions are supported via the application to application interface. In addition to the next available due date, twenty-nine alternate dates are returned by Ameritech Illinois. In Ameritech Illinois, a non-dispatch, dispatch, or standard interval due date is returned based on available facilities, and customer order parameters.

Feature/Service Availability Inquiry
This function provides for the availability of specific features and services at a particular local serving office switch.

This function in the SWBT and PB/NB regions is available via the EDI/CORBA, DataGate and Verigate interfaces. The SWBT and PB/NB EDI/CORBA interfaces validate the availability of a single feature or

service per transaction using the feature/service in USOC format as input. Inquiries via the DataGate and Verigate interfaces return a list of available features/service USOCs retrieved by ten-digit telephone number in the SWBT region. A list of USOCs and associated SOSC codes are retrieved using CLLI or NPA-NXX in the PB/NB region. In the SNET region, a list of available features in terms of SOSC codes is provided via the application to application interface and W-CIWin.

In Ameritech Illinois, this information is provided from a Data Validation file in USOC format, and is available via TCNet.

Network Channel/Network Channel Interface (NC/NCI) Inquiry
This function provides for the validation of Network Channel (NC) and Network Channel Interface (NCI) codes and their combinations prior to submitting a local service request.

In the SWBT and PB/NB regions, this function is available via the DataGate and Verigate interfaces. SNET does not currently support this function.

Ameritech Illinois does not currently support this function. Information regarding valid NC/NCI codes is provided via CLEC ordering documentation on TCNet.

Pending Order Status Inquiry
This function provides access to pending service order status and content prior to the conversion of an end-user account.

Utilizing the DataGate interface in the SWBT region, access to a list of pending service orders is provided by working telephone number. Detailed service order information is provided when an inquiry containing working telephone number and service order number is processed. This functionality is also available in the GUI interface called Order Status for both the SWBT and PB/NB regions. In that GUI, additional search criteria utilizing customer number and purchase order number are available to process a list of pending service orders and detailed service order information. SNET does not currently support this function.

Ameritech Illinois does not currently support this function.

PIC/LPIC Inquiry
This function provides a list of current Primary Interexchange Carrier (PIC) and ~~Local~~IntraLATA Primary Interexchange Carrier (LPIC) codes for carriers providing service at a particular local serving office switch.

A list of PIC/LPIC codes is retrieved by ten-digit telephone number via the EDI/CORBA, DataGate and Verigate interfaces in the SWBT region. A list is available by CLLI or NPA/NXX in the PB/NB region. SNET does not currently provide this function.

In Ameritech Illinois, list of PIC/LPIC codes are available using NPA/NXX through the application to application interface and via TCNet. Additionall~~l~~y, this information is available as part of the Data Validation Files.

Telephone Number Availability

These functions allow available telephone numbers to be identified and held for use by a CLEC submitting a local service request:

- Inquiry - Provides a list of available telephone numbers for a given local serving office switch.
- Inquiry/Selection - Provides and holds a list of available telephone numbers for a given local serving office switch.
- Reservation - Allows available telephone numbers to be held until either the receipt of a valid local service request, cancellation of reservation/selection, or the end of a specified holding period.
- Confirmation - Confirms previously reserved or held telephone numbers.
- Cancellation - Allows the release of telephone numbers previously reserved or held.

This function is available in the EDI/CORBA, DataGate and Verigate interfaces in the SWBT region and supports inquiry/selection and cancellation. This function is available in the same interfaces in the PB/NB region and supports inquiry, reservation and cancellation. Via the application to application interface and W-CIWin in the SNET region, this function supports inquiry/selection, and cancellation.

This function is available in Ameritech Illinois via the application to application interface and supports inquiry, reservation, confirmation and cancellation.

The following table summarizes functionality currently available in each of the SBC regions. Each row represents a function offered in at least one region. Unless otherwise noted, the Interface or GUI access options available by region are shown in the heading.

Function	**Existing Functionality and Interface(s) by Region**			
	SWBT **EDI/CORBA, DataGate, and Verigate**	**PB/NB** **EDI/CORBA, DataGate, and Verigate**	**SNET** **EDI and W-CIWin**	**Ameritech** **EDI and TCNet**
Address Validation	Numbered, Unnumbered, Unnamed, Descriptive inquiry	Numbered, Unnumbered, Unnamed, Descriptive inquiry	Numbered, Unnumbered, Unnamed, Descriptive inquiry	Numbered, Unnumbered, Unnamed, Descriptive inquiry
	WTN inquiry	WTN inquiry	---	---
Common Language Location Identifier (CLLI)	CLLI inquiry DataGate and Verigate	Information included as part of Feature/Service Availability	---	---
Connecting Facility Assignment (CFA)	CFA inquiry DataGate and Verigate	CFA inquiry DataGate and Verigate	---	---
Customer Service Information (CSI)	ATN inquiry	ATN inquiry	ATN inquiry	ATN inquiry
	WTN inquiry	WTN inquiry	---	WTN inquiry
Data Validation Files	SAG, PIC/LPIC, Features/Services	SAG, PIC/LPIC, Features/Services	Yellow Page Headings	SAG, PIC/LPIC, Features/Services, Yellow Page Headings, USOCs
	FTP, Direct:Connect, CLEC Web site	FTP, Direct:Connect, CLEC Web site	CLEC Web site	Direct:Connect, CD-ROM, CLEC Online Web site
DSL Loop Pre-qualification	Pre-qualification inquiry DataGate and Verigate	Pre-qualification inquiry DataGate and Verigate	---	---
DSL Loop Qualification	---	---	---	---

Function	Existing Functionality and Interface(s) by Region			
	SWBT **EDI/CORBA, DataGate, and Verigate**	**PB/NB** **EDI/CORBA, DataGate, and Verigate**	**SNET** **EDI and W-CIWin**	**Ameritech** **EDI and TCNet**
~~Directory Listing~~	~~ATN inquiry~~	~~Information included as part of CSI~~	~~ATN inquiry~~	~~Information included as part of CSI~~
Directory Listing	Information included as part of CSI	Information included as part of CSI	ATN inquiry	Information included as part of CSI
	~~WTN inquiry~~	—	—	—
	~~EDI/CORBA~~			
Dispatch	Dispatch inquiry	Dispatch inquiry	Dispatch information included in Address Validation inquiry	Dispatch information included in Due Date inquiry
Due Date	Inquiry Next available due date and 27 alternate dates available Resale and Loop w/ Port	Inquiry Next available due date only Resale and Loop w/ Port	Inquiry Next available due date and 4 alternate dates available Non-dispatch, dispatch or standard interval	Inquiry Next available due date and 29 alternate dates available Non-dispatch, dispatch or standard interval EDI only
	---	---	---	Reservation
	---	---	---	Confirmation
	---	---	---	Cancellation
Feature/Service Availability	Validation by individual Feature/Service EDI/CORBA List of Features/Services via DataGate and Verigate USOCs	Validation by individual Feature/Service EDI/CORBA List of Features/Services via DataGate and Verigate USOCs and SOSCs	List of Features/Services SOSCs	--- Features/Services via Data Validation File and TCNet USOCs
NC/NCI Validation	Validation inquiry DataGate and Verigate	Validation inquiry DataGate and Verigate	---	---
Pending Order Status	Pending inquiry DataGate and Order Status	Pending inquiry Order Status	---	---
PIC/LPIC List	Code inquiry	Code inquiry	---	Code inquiry
TN Inquiry	Inquiry/Selection 5 TNs	Inquiry 5 TNs	Inquiry/Selection 4 TNs	Inquiry 10 TNs EDI only
	---	Reservation 5 TNs	---	Reservation 1 TN
	---	---	---	Confirmation
	Cancellation	Cancellation	Cancellation	Cancellation

B. Ordering

Available Interfaces

Application to application access to Local Service Request (LSR)-based ordering functions is provided to CLECs in all SBC regions via an EDI interface, which is the industry standard means of communication for the ordering of local services. The application to application interfaces in all SBC regions currently run ASC-X12, Version 3072. SWBT, PB/NB and SNET have implemented LSOG Version 3, TCIF issue 8, whereas, Ameritech Illinois is currently on LSOG Version 2, TCIF issue 7.

EXACT is the Access Service Request (ASR)-based industry application to application interface utilized in the SWBT, Ameritech and SNET regions for ordering Unbundled Dedicated Transport (UDT) and Interconnection Trunks. Customer's Enhanced System for Access Requests (CESAR) is the ASR-based industry application to application interface utilized for the same purpose in PB/NB. Ameritech Illinois also allows the use of EXACT to order Loops. All regions are currently on ASOG Version 21.

The LSR Exchange (LEX) system is a GUI available to CLECs for ordering LSR-based services in the SWBT and PB/NB regions. SNET and Ameritech do not offer a GUI for LSR-based ordering.

Telis, an ASR-based GUI, is utilized in the SWBT, Ameritech and SNET regions for ordering UDT and Interconnection Trunks. Ameritech also allows the use of Telis for ordering Loops. PB/NB provides CESAR/online as an ASR-based GUI, for ordering UDT and Interconnection Trunks and also provides the GUI Customer's Enhanced System for Access Requests – Interconnection Service Requests (CESAR-ISR), for ordering Loops, Number Portability, and Loop with Number Portability.

Companies may be on the same version/~~-~~level of a given guideline, but the implementation may be different. Companies may have implemented some functions or products in advance of standards.

The following table summarizes the ordering application to application interfaces currently available in the SBC operating regions.

ORDERING	**SWBT**	**PB/NB**	**SNET**	**Ameritech**
Industry Applications	EDI	EDI	EDI (MSAP)	EDI
LSOG Version	3	3	3	2
TCIF Issue	8	8	8	7
X12 Version	3072	3072	3072	3072
ASR	EXACT	CESAR	EXACT	EXACT
ASOG VER.	21	21	21	21

The following table summarizes the ordering GUI interfaces available in the SBC operating regions.

GUIs	SWBT	PB/NB	SNET	Ameritech
LEX	X	X	-	-
LSOG VER.	3	3	-	-
CESAR ISR	-	X	-	-
ASOG VER.	-	21	-	-
TELIS	X	-	X	X
ASOG VER.	21	-	21	21
CESAR Online	-	X	-	-
LSOG VER.	-	NA	-	-

Ordering Message Flows

All SBC regions including Ameritech Illinois utilize the standard 997, 850, 855, 860 and 865 transaction sets for the various functions associated with the EDI ordering of Local Services. Ameritech Illinois also uses the 836 transaction. The following describes the current environment and the differences between the regions.

997 Transaction

All regions currently return a 997 transaction to the CLEC to acknowledge the receipt of a data transmission.

850/855 Transactions

A typical ordering transaction begins with a CLEC sending an 850 transaction. Positive or negative responses are returned to the CLEC via an 855 transaction to communicate the disposition of the request. If the request is error free, a positive response is sent in the form of a Firm Order Confirmation (FOC). If errors are detected, a negative response is sent in the form of error information detail. This process is the same in all regions.

In SWBT and PB/NB, two types of errors, fatal or super fatal, may be encountered in a negative 855 transaction. Fatal errors are the most common and these are corrected by the CLEC sending an 860 transaction. Super fatal errors are such that the request could not be processed due to key fields being invalid or missing. These are corrected by the CLEC by sending another 850 transaction. In SNET, when a negative response is received, regardless of the error type, the request is not processed and corrected 850 transactions are sent by the CLEC until the CLEC receives a positive 855 transaction.

In Ameritech Illinois, when a negative response is received regardless of any error type, the request is not processed and another 850 transaction is sent until the CLEC receives a positive 855 transaction. Additionally in Ameritech Illinois, a Purchase Order Advice is sent via an 855 transaction to acknowledge receipt of a request for Number Portability when more than 50 lines are included.

860/865 Transactions

The 860 transaction is used in all regions for a CLEC to submit a change (supplement) to a request. SWBT, PB/NB and SNET require a "full refresh" of the request, meaning that all previous and changed information is included in the supplement.

In Ameritech Illinois, only changed information is submitted on the 860 transaction.

Positive or negative responses are returned to the CLEC via an 865 transaction to communicate the receipt and acceptance or rejection of the supplement (860). Again if the request is error free, a positive response is sent in the form of an FOC. If errors are detected, a negative response is sent in the form of error information detail. To correct errors on an 860 transaction, another 860 transaction is sent. This is the same in all regions.

In SWBT and PB/NB, the 860 transaction could also be a response by the CLEC to a negative 855 transaction due to errors on the original request (850).

In Ameritech Illinois, the 865 transaction is also used to notify CLECs of customer impacting provider initiated changes. Additionally a Purchase Order Advice is sent via an 865 transaction to acknowledge receipt of a supplement for a change to a request for Number Portability when more than 50 lines are included.

~~836 Transaction~~

~~Currently, Ameritech is the only region utilizing the 836 transaction for Loss Notification.~~

The following table provides a summary of the EDI transaction usage on the ordering application to application interfaces in the SBC operating regions.

RECORD TYPE	SWBT	PB/NB	SNET	Ameritech
997	Acknowledgment	Acknowledgment	Acknowledgment	Acknowledgment
850	Initial Request	Initial Request	Initial Request	Initial Request
855	• FOC • Error Notice	• FOC • Error Notice	• FOC • Error Notice	• FOC • Error Notice • Purchase Order Advice
860	Supplements: • Initiate Change • Correct Errors on 850 record type • Correct Errors on 860 record type • Full refresh	Supplements: • Initiate Change • Correct Errors on 850 record type • Correct Errors on 860 record type • Full refresh	Supplements: • Initiate Change • Correct Errors on 860 record type • Full refresh on most products	Supplements: • Initiate Change • Changes only on supplement • Correct Errors on 860 record type
865	• FOC • Error Notice	• FOC • Error Notice	• FOC • Error Notice	• FOC • Error Notice • Customer impacting - provider initiated changes • Purchase Order Advice
~~836~~	~~NA – Handled via CARE process~~	~~NA – Handled via CARE process~~	~~• NA – Handled via CARE process~~	~~• Loss Notification~~

C. Provisioning

Provisioning functions, i.e. those functions used to manage and monitor an order during the period between the order placement and order completion, are provided by various processes in the operating regions that allow a CLEC to keep track of the status of an order. These processes are described below.

Certain provisioning functions are provided via the pre-ordering and ordering interfaces. Those functions that are based on an inquiry/response model, e.g. a CLEC asking for and receiving status on a pending order, are accessed using the pre-ordering interface. Order statuses, such as order completion, are proactively sent to the CLEC as the order is processed. These statuses are provided via the ordering interface.

Functions

Following are the provisioning functions available in the SBC operating regions.

Jeopardy Notification
Jeopardy Notification is used when alerting the CLEC that a situation has been encountered in the provisioning of an order that will potentially cause the confirmed due date to be missed.

These notifications are provided via the transaction message flows in the ordering application to application interfaces in the SWBT and PB/NB regions using the 865 transaction. This same notification is provided via the LEX GUI interface. The SNET region provides this notification via a manual process.

Jeopardy notification is currently provided in Ameritech Illinois via the ordering application to application interface using the 870 transaction.

Service Order Completion
Service Order Completion (SOC) is a notification to the CLEC that the work requested on a previously provided purchase order (or request) has been completed.

The SWBT, PB/NB and SNET regions all use the 865 transaction to return a SOC notification via the ordering application to application interface. This notification is also available via the LEX ordering GUI application in the SWBT and PB/NB regions.

Service Order Completion notification is currently provided ~~in~~by Ameritech Illinois via the ordering application to application interface using the 865 transaction.

PIC/LPIC Loss Notification
PIC/LPIC Loss Notification is a notification to the CLEC that a change requested by another Telecommunications Carrier (TC) has been completed and, as a result, the Primary Interexchange Carrier (PIC) or IntraLATA Primary Interexchange Carrier (LPIC) associated with a given telephone number has been changed.

The SWBT, PB/NB and SNET regions provide equivalent notifications to CLECs using the Carrier Access Record Exchange (CARE) process.

Ameritech Illinois currently provides PIC/LPIC Loss Notification via the ordering application to application interface using the 836 transaction.

Pending Order Status

This inquiry provides access to a list of pending service orders, and their status and content prior to the conversion of an end-user account, for pre-ordering purposes, and prior to the service order posting in the billing system for monitoring order progress.

Utilizing the DataGate interface in the SWBT region, access to a list of pending service orders is provided by working telephone number. Detailed service order information is provided when an inquiry containing working telephone number and service order number is processed. This function is also available in a GUI named Order Status in both the SWBT and PB/NB regions. In this GUI, additional search criteria utilizing customer number and purchase order number are available to access a list of pending service orders and detailed service order information. SNET does not presently support this function.

This function is not currently available in Ameritech Illinois. CLECs may monitor the progress of their orders using an Interactive Voice Response (IVR) system made available by Ameritech Illinois.

Posted Order Status

This inquiry provides access to posted service order status and content. The information provided represents completed service order status as posted to the billing system.

Access to this information is available in the Order Status GUI for the SWBT region. A list of posted service orders or detailed service order information is provided when an inquiry containing customer number is processed. Detailed service order information is provided when an inquiry containing working telephone number, service order number or purchase order number is processed. PB/NB and SNET do not currently support this function.

This function is not currently available in Ameritech Illinois.

Provisioning Order Status

This inquiry provides access to the service order provisioning information to determine the pending or dispatched status of a service order. The information provided presents the status of the order, such as whether it has been dispatched or notes regarding the order.

Access to this information is provided via the DataGate interface in the PB/NB region by customer number, service order number or telephone number. Access to this information is also available via the GUI named Provisioning Order Status for both the SWBT and PB/NB regions. SNET does not currently support this function.

This function is not currently available in Ameritech Illinois.

The following table summarizes the provisioning functions currently available in the SBC regions.

RECORD TYPE	SWBT	PB/NB	SNET	Ameritech
865	• SOC • Jeopardy Notice	• SOC • Jeopardy Notice	• SOC	• SOC
870	NA	NA	NA	Jeopardy Notice
836	• N/A – Handled	• N/A – Handled	• N/A – Handled	• PIC/LPIC

RECORD TYPE	SWBT	PB/NB	SNET	Ameritech
	via CARE process	via CARE process	via CARE process	Loss Notification
Proprietary Message Event via DataGate	• Pending Order Status	• Provisioning Order Status	NA	NA
Graphical Data Provided via the Order Status and Provisioning Order Status GUIs	• Pending Order Status • Provisioning Order Status • Posted Order Status	• Pending Order Status • Provisioning Order Status	NA	NA

D. Maintenance and Repair

Available Interfaces

All SBC ~~Companies offer some form of~~regions including Ameritech Illinois offer application to application and GUI~~trouble administration~~ maintenance and repair interfaces. Ameritech, PB/NB, and SWBT all support application to application interfaces for Electronic Bonding Trouble Administration (EBTA)~~. Application to application interfaces are~~ based on the American National Standards Institute (ANSI) Standards. SNET offers a non-standard application to application interface, MSAP, to support ~~POTS maintenance and repair functions. The functions and attributes supported by EBTA are defined with each CLEC through a Joint Implementation Arrangement (JIA).~~ maintenance and repair functions.

All regions in SBC have developed their own GUI interface. Each GUI supports various functions with different presentations to the end user.

PB/NB offers Pacific Bell Service Manager (PBSM). It allows a customer to: Create a trouble report, view trouble history, retrieve trouble status and perform MLT tests on Resale POTS and loop with port.

SWBT offers Toolbar/Trouble Administration. It allows a customer to: Create a trouble report, view trouble history, retrieve trouble status and perform MLT tests on Resale POTS and loop with port.

SNET offers CCTools, that allows a customer to view trouble history and retrieve trouble status for resale POTS products.

Ameritech Illinois offers EBTA II GUI. It allows a customer to: Create a trouble report, view status history, receive proactive status, clear and close trouble reports. It provides similar functionality to the application to application interface.

The following table is a summary of the maintenance and repair application to application and GUI interfaces in the various SBC regions.

SYSTEM	SWBT	PB/NB	SNET	Ameritech
~~APP-TO-APP~~	~~System: Electronic Bonding –TA~~ ~~T1.262:1998 (Release 4.5 8/99)~~ ~~T1.227A (Release 5.1 10/99)~~ ~~T1.228:1995~~ ~~T1.227:1995~~ ~~Release 4.1.0~~	~~System: Electronic Bonding –TA~~ ~~T1.262:1998 (Release 4.5 8/99)~~ ~~T1.227:1995~~ ~~T1.227A (Release 5.1 Oct/99)~~ ~~T1.228:1995~~ ~~Release 4.1.0~~	~~System : MSAP~~ ~~EDI format,~~ ~~POTS (non-ANSI Standard)~~ ~~Release: N/A~~	~~System: Electronic Bonding –TA~~ ~~Standard: T1.227:1995; T1.227a:1998~~ ~~T1.228:1995~~ ~~Release: 5.0~~
APP -TO-APP	System: Electronic Bonding –TA T1.262:1998 (Release 4.5 8/99) T1.227A (Release 5.1 10/99) T1.228:1995 T1.227:1995 Release 4.1.0	System: Electronic Bonding –TA T1.262:1998 (Release 4.5 8/99) T1.227:1995 T1.227A (Release 5.1 Oct/99) T1.228:1995 Release 4.1.0	System : MSAP EDI format Release: N/A	System: Electronic Bonding –TA T1.227:1995; T1.227a:1998 T1.228:1995 Release: 5.0
GUI	System: Toolbar / TA Create Trouble Reports MLT Test POTS / loop with port View trouble history View status View trouble report list. Clear and Close GUI-Windows Based Release 5.1.0	System: PBSM Create Trouble Reports MLT Test POTS / loop with port View trouble history View status View trouble report list. Telnet –VT100 Terminal Emulation Release: 8.3	System: CCTools View trouble history View status GUI-Windows based Release: NA	System: EBTA II GUI Create Trouble Reports View status history Receive status View status View trouble report list. Clear and Close GUI-Windows Based Release: 1.0

The following table shows the business functions that can be performed by the various regional GUIs. The business functionality and the screen designs are different for each region. In most cases the information entered into the fields on the GUI is mapped to data fields in the back end Operating Support Systems (OSS).

FUNCTION	SWBT (TOOLBAR –TA)	PB/NB (PBSM)	SNET (CCTOOLS)	Ameritech (EBTA GUI)
Create				
Circuit Types (Telcordia valid circuit ids)	Yes	Yes	No	Yes
Access Hours (test and premise access hrs)	Yes	Yes	No	Yes
Narrative	Yes	Yes	No	Yes
Trouble Type	Yes	Yes	No	Yes
Dispatch Authorization	Yes	Yes	No	Yes
Contact information	Yes	Yes	No	Yes
TSP Priority	No	No	No	Yes
Status Interval	No	No	No	Yes
Comments /Notes	No	No	No	Yes
Cancel	No	No	No	Yes

Modify info after create	No	No	No	Yes
Messaging	Yes	Yes	No	Yes
Get Status (refresh)	Yes	Yes	Yes	Yes
Modify	No	No	No	Yes
Proactive Statusing	No	No	No	Yes
Escalations	No	No	No	Yes
Clear / Close	No	No	No	Yes
History	Trouble	Trouble	Trouble	Ticket Status
MLT Test	Yes	Yes	No	No
Status notification	No	No	No	Yes
Estimated Repair Time	No	No	No	Yes
WEB Version	No	No	No	Yes
Circuit Security Supports MCN, ACNA, or CCNA	Yes	Yes	No	Yes (not MCN)
Close out Narrative	Yes	Yes	No	Yes
Circuit Inventory	Yes	No	No	No
Binding Post	No	Yes	No	No

E. Billing

The CLEC billing interfaces have been organized into four categories:

- Bill Data Tape (BDT)
- Exchange Message Interface (EMI) Daily Usage
- Electronic Data Interchange (EDI)
- Online Viewing/GUI

Bill Data Tape (BDT)

All SBC regions,~~SWBT, PB/NB, SNET and Ameritech,~~ provide CLECs with billing data related to their purchase of unbundled network elements (UNEs). The primary billing vehicle for billing UNEs is Carrier Access Billing System (CABS), which produces the BDT file format. All~~four~~ regions adhere to the same CABS Billing Output Specifications (BOS) national standards for bill media, software version control, user documentation, and user notification. Additionally, all~~SBC~~ regions provide BDT data on comparable output mediums that include electronic transmission and tape.

There are other differences in the BDT records produced for CLECs across the SBC regions, but these are due largely to region-specific tariff and contracts and will continue to exist until such time as cross-region tariffs and contracts are negotiated.

Exchange Message Interface (EMI)

SBC has a responsibility to provide CLECs with usage messages that may be used in the billing of their end-customers. The CLECs receive usage files containing EMI records that provide the billing details for individual messages. The four SBC regions follow industry-accepted Ordering and Billing Forum (OBF) EMI format for message exchange.

At the inception of local exchange competition, all Incumbent Local Exchange Carriers (ILECs) independently worked with CLECs to interpret the application of the OBF EMI guidelines, due to lack of complete and definitive industry guidelines. These region-specific interpretations resulted in the population of EMI records that currently differ somewhat amongst the SBC regions.

Ameritech Illinois provides notification of changes in EMI record formats through its TCNet web site 45 days in advance of implementation. Other SBC regions provide this notification via the Accessible Letter process 60 days in advance.

Electronic Data Interchange (EDI)

~~The~~All SBC regions provide CLECs with billing information that originates from their core retail billing systems representing primarily the Resale of local exchange service. Currently, SWBT and PB/NB provide this billing information following the EDI 811, version 4010 telecommunications industry guidelines for billing transactions. The other two regions, Ameritech and SNET, are currently providing Resale billing information under a Telcordia (Bellcore) standard, the AEBS 450.

Online Viewing/GUI

SWBT offers a GUI application, Bill Info, as part of its desktop Toolbar that provides on-line access to billing information. This application provides on-line access to the image of the CLEC's rendered bill. There has been limited use of this capability by only three CLECs. Recent collaborative meetings with representatives of the CLEC community did not identify an interest in on-line access to the rendered bill.

Online Viewing of Resale and UNE bill images is not available in the other SBC regions, including Ameritech Illinois.

The table below summarizes the currently available interfaces, versions and bill delivery methods previously described.

Billing	SWBT	PB/NB	SNET	Ameritech
EMI	Record Format: EMR/EMI	Record Format: EMR/EMI	Record Format: EMR/EMI	Record Format: EMR/EMI
(for Daily Usage Delivery)	Transmit to CLEC	Transmit or tape to CLEC.	Transmit to CLEC.	Transmit or tape to CLEC by State.
BDT	System: CABS	System: CABS	System: CABS	System: CABS
	Standard/Format: Bill Data Tape (BDT)	Standard/Format: Bill Data Tape (BDT)	Standard/Format: Bill Data Tape (BDT)	Standard/Format: Bill Data Tape (BDT)
	Version 32	Version 32	Version 32	Version 32
EDI/AEBS	System: Electronic Data Interchange Billing (EDIB)	System: Electronic Data Interchange Billing (EDIB)	System: Customer Records & Information System (CRIS)	System: Ameritech Billing Management System (ABMS)
	Standard: EDI 811	Standard: EDI 811	Standard: Bellcore Mag Billing Tape Plan	Standard: Bellcore Mag Billing Tape Plan
	Record Format: 4010	Record Format: 4010	Record Format: AEBS 450	Record Format: AEBS 450
	Same Info as Paper Bill	Same Info as Paper Bill	Detail Supporting Summary Paper Bill	Detail Supporting Summary Paper Bill
	Transmit to CLEC	Transmit to CLEC	Magnetic Tape or Cartridge	Transmit to CLEC or Alternative Media
Online Viewing	System: TOOLBAR/Bill Info Function: CLEC can view Resale & UNE bill including payments/adjustments, CSR, and Subscription reports.	None	None	None

F. Connectivity

Although all regions within SBC currently offer CLECs connectivity to OSS, there are some differences in the form of connectivity offered, the type of facility utilized, and the ownership and maintenance of connectivity equipment.

In both its SWBT and PB/NB regions, SBC currently has~~a~~ Remote Access ~~Facility (RAF) that is~~Facilities (RAFs) that are solely dedicated for CLEC use in accessing SBC's OSS. The SWBT facility, known as the LRAF, is located in Dallas, Texas, while the PB/NB facility, called the PRAF, is centered in Fairfield, California.

Both the LRAF and PRAF are configured with a number of routers capable of terminating private line and frame relay connections and with access servers to terminate analog modem and ISDN dial-up connections. These terminating routers and access servers are connected to a Local Area Network (LAN) which in turn provides for connectivity to the SBC network "firewall" systems. These secured firewalls use access lists to prevent unauthorized entry into other internal SBC systems that are outside the scope of those OSS offered to CLECs.

Routers for the LRAF and PRAF are provided and maintained by SWBT and PB/NB. CLECs provide their own circuit, ~~DSU/CSUs,~~Data Service Unit/Channel Service Units (DSU/CSUs), connectors and cables. Specifications are given to the CLEC for the DSU/CSUs (to be placed on both ends of the CLEC provided circuit) and as well as circuit line coding and framing parameters.

SNET currently allows access to its OSS via their New Haven, Connecticut network connectivity location, but does not maintain a separate facility dedicated just for CLEC use. Private line and shared frame relay connections are allowed, but dial-up access is not available. CLECs must provide and maintain their own router and CSU/DSU. Hence, CLECs are given access to SNET's premises to install and maintain their own equipment. As part of the SNET merger initiative, work was done during 1999 to establish a dedicated facility (to be called the SRAF) for CLEC use within the SNET region. The building and testing of the private line and frame relay portion of the SRAF is slated to take place during the first quarter 2000, with plans to secure and install the addition of access servers to terminate analog modem and ISDN dial-up connections shortly thereafter.

CLEC connectivity to most of Ameritech's OSS is via private line or frame relay. However, some applications are accessed via the Internet, where security is provided via the use of Digital Certificates. For private line or frame relay connections, CLECs must provide their own CSU/DSU which is then installed and maintained by Ameritech personnel. Ameritech Illinois provides connectivity to its OSS via either Ameritech's Chicago, Illinois or Southfield, Michigan Electronic Commerce Network (ECN) rather than through a separate facility dedicated for CLEC use.

The table below compares the present method of operation and the varying connectivity-related items within the four SBC regions.

Item/Function	SWBT	PB/NB	SNET	Ameritech
Dedicated CLEC Facility	Yes	Yes	No	No
Private Line / Frame Relay connections	Yes	Yes	Yes	Yes
Dial-up Connections	Yes	Yes	No	No
SBC provides and maintains routers	Yes	Yes	No	Yes
CLEC provides circuit and CSU/DSUs	Yes	Yes	Yes	Yes
SBC installs and maintains CSU/DSUs	Yes	Yes	No	Yes
Internet access using Digital Certificates	No	No	No	Yes

III. FUTURE METHOD OF OPERATION (FMO)

A. Overview

Through the PMO evaluation, SBC has identified OSS process and interface modifications for Ameritech Illinois. The following section details Ameritech Illinois' plans to develop and implement these modifications in the pre-ordering, ordering, provisioning, maintenance and repair, and billing interfaces. The deployment plan will comply with the ICC SBC/Ameritech merger conditions and timeline.

~~A.~~ Evaluation of the appropriate industry standards and guidelines was a major part of the FMO analysis. As a result, planned enhancements are wholly consistent with standards and guidelines of the industry bodies previously identified. The specific versions of the standards and guidelines for all functions with the issuing body are identified in the following table:

Function	Applicable Standard(s)
Pre-ordering, Ordering and Provisioning	• OBF LSOG 4 • OBF LSOG 5 • SOSC version 10 • SOSC ELMS 5 • ECIC T1.265-1999 • ECIC T1.267-1999
Repair and Maintenance	• T1M1 T1.227a-1998 • T1M1 T1.228-1995 • T1M1 T1.262-1998
Billing	• OBF BDT 32 • OBF EMI Version 17 • TCIF Billing Issue 4010

Additional detail on all planned enhancements will be made available per the Change Management Process. This process also allows for CLEC input at multiple points prior to implementation of the enhancements.

B. Pre-ordering

There are three planned ~~changes~~updates scheduled for the pre-ordering interface during the eighteen months following the SBC/Ameritech merger close.
~~close.~~
The first will be the addition of four new functions to the~~current~~ EDI interface. ~~Certain~~These pre-ordering functions, Connecting Facility Assignment Inquiry, DSL Loop Qualification, Feature/Service Availability, and Network Channel/Network Channel Interface Inquiry will be made available to provide interactive access to~~data previously provided by Ameritech Illinois only through Data Validation Files.~~data. These functions will be available ~~in April 2000.~~on April 3, 2000. Specifications for these functions have been published and made available via TCNet as of February 7, 2000, and have been made an attachment to this document (see Attachment B).

~~This will be followed by~~Second will be the introduction of an updated version of the~~current~~ EDI application to application interface in March 2001. This version of the interface will provide

additional ~~functionality,~~functionality and update the interface to LSOG 4 unless another guideline version is selected via the Change Management Process.

~~a more recently available version of OBF and TCIF standards, and~~As a part of this second update in March 2001, Ameritech Illinois will make CORBA available as an alternative to ~~EDI.~~
EDI. CORBA has been selected by the T1M1 standards organization as appropriate for pre-ordering functions for local service products. T1.265-1999 covers the majority of pre-ordering functions and was approved April 1999. T1.267-1999 applies to the CSI Inquiry and Directory Listings Inquiry and was approved August 1999. SBC will base its implementation upon these T1M1 IDL data models, where available. Non-repudiation of EDI requests will not be supported and message receipts will be required. Security will be implemented in accordance with T1M1 T1.265 security specifications.

Specifications for this updated interface version will be developed and published per the SBC OSS Change Management Process. As a result, initial specifications for this release are scheduled to be available to CLECs no later than July 2000, followed by a period for CLEC comment before specifications are finalized.

~~At the same time,~~The third update, also in March 2001, will provide a pre-ordering GUI interface~~will be made available~~ to CLECs in Ameritech Illinois. This GUI interface will be an enhanced version of the existing Windows-based Verigate application offered in the SWBT and PB/NB regions, and will provide access to pre-ordering functionality ~~similar~~equivalent to that available on the application to application interface.
Attached to this document is the User Guide for the existing Verigate application as deployed in the SWBT and PB/NB regions (see Attachment C). User documentation and release specifications for the enhanced Verigate to be deployed in Ameritech Illinois in March 2001 will be available to CLECs in February 2001.

The following pre-ordering functionality is planned for the updated application to application and GUI interface. These functions will be available via the application to application interface in both EDI and CORBA.

Address Validation Inquiry
The Address Validation function will continue to be available in Ameritech Illinois. As part of the~~updated~~ application to application and GUI interfaces in March 2001, it will provide access to validated address information by address or working telephone number. This working telephone number inquiry will be available for residential service only. Address information will also continue to be available as a Data Validation File.

Common Language Location Indicator (CLLI) Inquiry
This function will be made available in Ameritech Illinois via the~~updated~~ application to application and GUI interfaces in ~~March, 2001.~~March 2001. It will provide the CLLI code associated with a telephone number, and is used to determine the appropriate CLLI to be submitted on a local service request for port or loop with port service.

Connecting Facility Assignment (CFA) Inquiry
This function will be~~first~~ made available as part of the functionality addition ~~in~~to the existing application to application interface on April ~~2000.~~3, 2000, specifications for which are attached.
Based on the input facility number, this function may be used to verify the status of a connecting

facility prior to submitting this information on a local service request. This function will continue to be~~made~~ available in Ameritech Illinois via both the~~updated~~ application to application and GUI interfaces in March~~,~~ 2001.

Customer Service Information Inquiry

This function will continue to be available in Ameritech Illinois. It will be available via both the~~updated~~ application to application and GUI interfaces in March~~,~~ 2001, and will provide for the retrieval of customer service records for accounts belonging to the requesting CLEC or to Ameritech Illinois retail units, but not when accounts are owned by another CLEC. CSI records may be retrieved using account telephone numbers or individual working telephone numbers. The CSI will be parsed in the same manner that it is currently being parsed within SWBT.

Data Validation Files

Data Validation Files will continue to be available in Ameritech Illinois. The directory names, class of service codes, USOC, community names, yellow page headings, feature/service availability, and PIC/LPIC code files will be available via Connect:Direct, CD-ROM or downloadable using the pre-ordering GUI. Due to its size, the street address guide will be available only via Connect:Direct and CD-ROM. ~~The content and format of the Data Validation Files will be modified.~~

Digital Subscriber Loop Pre-qualification Inquiry

This function will not be available via this plan in Ameritech Illinois either in the application to application or GUI interfaces. This choice is based on CLEC feedback, and on the availability of the Loop Qualification Inquiry.

Digital Subscriber Loop Qualification Inquiry

Ameritech Illinois will furnish CLECs with access to a loop qualification function that can be used to qualify loops on a pre-order basis. This function will provide CLECs with access to a mechanized loop qualification capability that can be used to qualify loops on a pre-order basis, and will be available the application to application interface. This mechanized loop qualification will provide the CLECs with the information needed to make an informed business decision regarding its ability to provide DSL-based service to the end user.
~~a specific end user.~~
The loop qualification/loop make-up response will return the following information to the CLEC for a loop to the specified end user premises:

Loop length
Loop length by segment
Length by gauge
26 gauge equivalent loop length (calculated)
Presence of load coils
Quantity of load coils (if applicable)
Presence of bridged taps
Length of bridged taps (if applicable)
Presence of pair gain/DLC

In addition, the following information will be returned when available:

Location of load coils
Location of bridged tap

Type of DLC
Presence of DAML
Loop medium

This function will be~~first~~ made available as part of the functionality addition ~~in April 2000 as described more completely in the xDSL POR filed with the FCC on 12/7/99, and will then~~to the application to application interface on April 3, 2000, and will continue to be available via the~~updated~~ application to application and GUI interfaces in March 2001. Detailed specifications for this function are attached (see Attachment D).

Directory Listing Inquiry
This information will continue to be available using the Customer Service Information Inquiry. Additionally, a Directory Listing function will be made available in Ameritech Illinois via the~~updated~~ application to application and GUI interfaces in March 2001. The function will provide for the retrieval of listing information by either account telephone number or individual working telephone number. This function will be available for accounts belonging to the requesting CLEC or to Ameritech Illinois retail units, but not for accounts owned by another CLEC.

Dispatch Inquiry
The Dispatch Inquiry function will be made available in Ameritech Illinois as a standalone inquiry via the~~updated~~ application to application and GUI interfaces in March 2001.
This function indicates when the dispatch of an SBC/Ameritech technician is required for residential service ordered on a local service request. Dispatch is based on the existence of cut-through facilities and assists the CLEC in determining the due date that may be quoted to the end user.

Due Date Inquiry
The Due Date function will continue to be available in Ameritech Illinois, and will be available via both application to application and GUI interface ~~as a standalone inquiry function in March, 2001.~~in March 2001. This function allows for the identification of available premise visit dates for services to be ordered on a local service request. If alternate dates are requested, a total of thirty available dates will be returned.

Feature/Service Availability Inquiry
The Feature/Service Availability function, which provides for the availability of specific features and services at a particular local serving office switch, will be made available in Ameritech Illinois as part of the functionality addition to the~~current~~ application to application interface ~~in~~on April 3, 2000. Detailed specifications for this transaction are attached. This function will continue to be available via both the~~updated~~ application to application and GUI interfaces in March 2001. This same information will also continue to be available as a Data Validation file.

Network Channel/Network Channel Interface (NC/NCI) Inquiry
The Network Channel (NC) and Network Channel Interface (NCI) Codes Inquiry function will be~~first~~ made available as part of the functionality addition to the ~~current~~application to application interface ~~in~~on April 3, 2000. Detailed specifications for this transaction are attached. This function provides for the validation of Network Channel (NC) and Network Channel Interface (NCI) codes and their combinations prior to submitting a local service request. The NC/NCI Inquiry will continue to be available in Ameritech Illinois via both the~~updated~~ application to application and GUI interfaces in March 2001.

Pending Order Status Inquiry

Pending Order Status functionality will be made available in Ameritech Illinois via the~~updated~~ application to application and GUI interface in March 2001. A list of pending service order information will be provided by working telephone number and detailed service order information will be supported by working telephone number, customer number or purchase order number.

PIC/LPIC Inquiry

The PIC/LPIC Inquiry provides a list of current Primary Interexchange Carrier (PIC) and IntraLATA Primary Interexchange Carrier (LPIC) codes for carriers providing service at a particular local serving office switch. This function will continue to be available in Ameritech Illinois~~. It will be available~~ via both the~~updated~~ application to application and GUI interfaces in March, 2001. This same information will continue to be available as a Data Validation file.

Telephone Number Availability

The~~currently available~~ Telephone Number ~~functions (inquiry, reservation, confirmation, and cancellation) will~~Availability function will continue to be supported in the~~updated~~ application to application and GUI interfaces~~available~~ in March 2001. The telephone number reservation period will be increased to thirty calendar days.

The following table summarizes the pre-ordering functions to be provided via the~~updated~~ application to application and GUI interfaces in March 2001. Those functions that will be available ~~in~~on April 3, 2000 are marked with an asterisk (*).

Function	Updated Application to Application and GUI interface
Address Validation	Numbered, Unnumbered, Unnamed, Descriptive inquiry
	WTN inquiry
Common Language Location Identifier (CLLI)	CLLI inquiry
Connecting Facility Assignment (CFA)*	CFA inquiry
Customer Service Information (CSI)	ATN inquiry
	WTN inquiry
Data Validation Files	SAG, PIC/LPIC, Features/Services, Yellow Page Headings, USOCs
	Direct:Connect, CD-ROM, Download via GUI
~~DSL Pre-qualification Inquiry~~	~~Loop Qualification inquiry~~
DSL Loop Qualification Inquiry	Loop Qualification Inquiry
Directory Listing Inquiry	ATN inquiry
	WTN inquiry
Dispatch	Dispatch inquiry
Due Date Inquiry	Inquiry Next available due date and 29 alternate dates available
Feature/Service Availability*	List of Features/Services by USOC
NC/NCI Validation*	Validation inquiry
Pending Order Status	Pending inquiry
PIC/LPIC List	Code inquiry Data Validation File
TN Availability	Inquiry 10 TNs
	Reservation 1 TN
	Confirmation
	Cancellation

C. Ordering

~~An~~A Windows-based ordering GUI, an enhanced version of the LEX application currently available in the SWBT and PB/NB regions, will be implemented ~~providing~~by Ameritech Illinois. This will provide the CLECs with a robust set of order submission and order management functions. It will be consistent in data field terminology with OBF LSOG 4 ~~the OBF LSOG,~~subject to further discussion

under the Change Management Process. It will have functionality equivalent to that of the application to application interface, and will be provided in March 2001.
Attached to this document is the User Guide for the existing LEX application as deployed in the SWBT and PB/NB regions (see Attachment E). User
~~Differences between SBC regions identified in the PMO will be addressed in response to the Uniform and Enhanced OSS requirements set forth in the FCC Merger Conditions released on October 8, 1999. As a result, some elements of the current EDI message flow will be modified. However, these changes will take place beyond the timeframe considered by this Ameritech Illinois POR, and will be fully described in the Plan of Record filed with the FCC.~~ documentation and release specifications for the enhanced LEX GUI to be deployed in Ameritech Illinois in March 2001 will be available to CLECs in February 2001.

In alignment with its commitment to industry standards and guidelines, Ameritech Illinois will be updating its application to application ordering interface to be consistent with the EDI 10 (LSOG 4) in August 2000. This enhancement was committed to prior to the SBC/Ameritech merger. This and other enhancements to the ordering application to application interface will continue to be implemented during the period of this plan and be managed per the Change Management Process. The ordering changes specifically resulting from this plan are those in support of the ordering of unbundled xDSL capable loops.

To improve the ordering process for ~~xDSL-capable~~ unbundled DSL-capable loops, some modification of data field usage will be made effective in December 2000. These changes will be more fully described in specifications provided as part of the advance notification process, but will include:

~~Utilizing the LSR Customer Number (CNO) field as a tracking code for pre-order loop qualification~~

- Requesting line conditioning using the LSR Service or Product Enhancement Code (SPEC) field
- Requiring the LSR Type of Service (TOS) field to indicate whether a loop is for residence or business service
- Validating that an available loop can support the requested Power-Spectrum Density (PSD) class before confirming a received order

Line sharing is the term used to describe the simultaneous transmission of data and voice services over a single twisted copper cable. In response to the FCC's Line Sharing Order (Third Report and Order in Docket 98-147 and Fourth Report and Order in Docket 96-98), CLEC requests, and SBC line sharing trials, Ameritech Illinois proposes to establish electronic ordering for line-shared DSL services via Ameritech Illinois's EDI interface. Initial notification of ordering details is targeted for release by March 3, 2000. Ameritech Illinois will continue to discuss these issues in the Change Management Process to facilitate implementation of this capability on an expedited basis using the exception process.

D. Provisioning

An ~~enhancement~~update to currently provided provisioning functionality is planned for March 2001. This ~~enhancement~~update will put into place two inquiry and response transactions that will provide access to service order status information pertaining to the provisioning of a CLEC's purchase orders. These transactions, Pending Order Status and Provisioning Order Status, will be available in addition to the existing Jeopardy Notification and Service Order Completion ~~transactions.~~

transactions. The Pending Order Status and Provisioning Order Status transactions will be provided via the pre-ordering application to application and GUI interfaces, and will be consistent with the current implementation of these functions in the SWBT and PB/NB regions. The User Guide for the Order Status GUIs currently in use in the SWBT and PB/NB regions, and the DataGate specifications for the Order Status transaction currently available in those same regions, have been included as a guide to the functionality to be included in these transactions (see Attachments F, G, and H). The implementation of these transactions will be subject to discussion as described in the Change Management Process.

Jeopardy Notification

Jeopardy Notification is used when alerting the CLEC that a situation has been encountered in the provisioning of an order that will potentially cause the confirmed due date to be missed.

Jeopardy notification will continue to be provided ~~in~~by Ameritech Illinois ~~on~~via the ordering application to application interface~~,~~ and will be a function of the ordering GUI interface available in March 2001.

Service Order Completion

Service Order Completion notification will continue to be provided ~~in~~by Ameritech Illinois via the ordering application to application interface using the 865 transaction, and will be a function of the ordering GUI interface available in March 2001.

PIC/LPIC Loss Notification

Ameritech Illinois will continue to provide PIC/LPIC Loss Notification via the ordering application to application interface using the 836 transaction, and will make this notification a function of the ordering GUI interface, which will be available in March 2001.

Pending Order Status

Pending Order Status functionality will be made available via the~~updated~~ pre-ordering application to application and GUI interfaces in March 2001.

Posted Order Status

Posted Order Status functionality will not be made available ~~in~~by Ameritech Illinois. The capability to provide this function does not currently exist within Ameritech, and it is therefore also not available to Ameritech Illinois retail customer service representatives.

Provisioning Order Status

Provisioning Order Status functionality will be made available via the~~updated~~ pre-ordering application to application and GUI interfaces in March 2001.

E. Maintenance and Repair

~~SBC will enhance its current~~Ameritech Illinois will continue to offer a standardized application to application interface and a highly functional and easily accessible GUI for CLEC trouble administration. The EBTA application to application interface offered by Ameritech Illinois is based on ANSI standards T1.227:1995, T1.227a:1998, and T1.228:1995 developed by the T1M1 committee. This application to application interface supports the set of data attributes defined by the standards in a manner consistent with those standards. This list of supported attributes is contained in a table below.

The EBTA II GUI provides a common presentation to all end users, and provides functionality equivalent to that of the EBTA application-to-application interface. Ameritech Illinois will enhance its current application to application interface and GUI for ~~Maintenance and Repair in~~maintenance and repair in second quarter of 2000. The following business functionality will be added:

- MLT Testing functionality for application to application and GUI

  This will enable CLECs to test resold POTS and loop with port. This will allow a faster determination of the trouble source without Ameritech manual intervention. This ability will allow a CLEC to test the loop while the customer reporting the trouble is still on the call.

  The application to application interface will be compliant with the ANSI T1.262 industry standard. The EBTA II GUI will provide equivalent functionality.

- GUI edits to conform to TRFD3 (ECIC Trouble Report Format Definition)

  This enhancement will reduce the amount of information necessary to report trouble on a POTS line or a loop with port line by using enhanced industry guidelines. This will simplify and streamline the process for reporting troubles through the GUI, and will give the GUI functionality equivalent to that of the application to application interface.

- GUI Activity Duration window to show billable hours

  The Activity Duration window will provide the CLEC with information on what type of repair activity occurred (e.g., dispatch, after hours repair) while clearing a special services trouble. This will supply details on the duration of each activity and whether or not it was billable, and will give the GUI functionality equivalent to that of the application to application interface.

MLT testing will be made available in Ameritech Illinois on April 3, 2000. Specifications for this change were distributed to CLECs on February 28, 2000 and are attached (see Attachment I). The other two changes, the TRFD3 edits and the Activity Duration window, will be made available in June 2000.

The following table summarizes the enhancements to be made to the maintenance interfaces in the second quarter of 2000.

SYSTEM	**Ameritech**
APP –TO-APP	System: Electronic Bonding – TA • MLT Test POTS and loop with port Standard: T1.262

GUI	System: EBTA II GUI • MLT Test POTS and loop with port • GUI Edits to conform to TRFD3 • GUI Activity Duration window for special services

The following table details the data attributes that will be supported by the uniform application to application interface:

ATTRIBUTE LABEL	**SBC**
ActivityDuration	Supported with Limitations
AdditionalTroubleInfoList	Supported per Standard
AdditionalTroubleStatusInfo	Supported per Standard
AgentContactPerson	Supported per Standard
AuthorizationList	Supported per Standard
CalledNumber	Supported per Standard
CancelRequestedByManager	Supported per Standard
CloseOutNarr	Supported per Standard
CommitmentTime	Supported per Standard
CommitmentTimeRequest	Supported per Standard
CloseOutVerification	Supported per Standard
CustTroubleTickNum	Supported per Standard
CustomerWorkCenter	Supported per Standard
EscalationList	Supported per Standard
ALocationAccessAddress	Supported per Standard

ATTRIBUTE LABEL	SBC
ZlocationAccessAddress	Supported per Standard
AlocationAccessHours	Supported per Standard
ZlocationAccessHours	Supported per Standard
aLocation Access Person	Supported per Standard
ZLocationAccessPerson	Supported per Standard
MaintServiceCharge	Supported per Standard
ManagedObjectInstance	Supported per Standard
ManagedObjectInstAliasList	Supported per Standard
ManagerContactPerson	Supported per Standard
PerceivedTroubleSeverity	Supported per Standard
PreferredPriority	Supported per Standard
ReceivedTime	Supported per Standard
RepeatReport	Supported per Standard
RestoredTime	Supported per Standard
TroubleClearancePerson	Supported per Standard
TroubleDetectionTime	Supported per Standard
TroubleFound	Supported per Standard
TroubleReportFormatObjectPtr	Supported per Standard
TroubleReportFormatIdentifier	Supported per Standard
TroubleReportID	Supported per Standard
TRMustBePresentAttrIdList	Supported per Standard
TRMayBePresentAttrIdList	Supported per Standard
TroubleReportState	Supported per Standard

ATTRIBUTE LABEL	SBC
TroubleReportStatus	Supported per Standard
TroubleReportStatusTime	Supported per Standard
Trouble Report Status Window	Supported per Standard
Trouble Type	Supported per Standard
Tsp Priority	Supported per Standard
CustomerInfo	Supported per Standard

The following table details the business functions that will be supported by the GUI interface. The information input into the GUI's fields will be mapped to the same locations, in the back end OSS, as the application to application interface.

FUNCTION	EBTA II GUI
Create Circuit Types Access Hours Narrative Trouble Type Dispatch Authorization Contact information TSP Priority Status Interval Comments /Notes	 Telcordia valid circuit ids test and premise access hrs Yes Yes Yes Yes Yes Yes Yes
Cancel	Yes
Modify info after create	Yes
Messaging	Yes
Get Status (refresh)	Yes
Modify	Yes
Proactive Statusing	Yes
Escalations	Yes
Clear / Close	Yes
Trouble History	Yes
MLT Test	Yes
Status notification	Yes
Estimated Repair Time	Yes
WEB Version	Yes

Circuit Security Supports MCN, ACNA, or CCNA	Yes
Close out Narrative	Yes

F. Billing

Billing as delivered by Ameritech Illinois is substantially in accordance with applicable industry standards and guidelines. For example, Bill Data Tape (BDT) output standards are mature, since they have been used for access billing for several years, and the use of BDT in Ameritech Illinois is largely consistent with industry standards. The industry evolved ahead of the formulation of industry EMI guidelines, so variations from current guidelines exist in the Ameritech Illinois EMI implementation. Ameritech Illinois adopted a Telcordia (formerly Bellcore) standard for Resale electronic bill presentation.

Where necessary to be consistent with the most current version of industry standards and guidelines, Ameritech Illinois will update these billing interfaces.

Bill Data Tape (BDT)

The BDT in Ameritech Illinois is consistent with the most current version, version 32, of the applicable standard. Therefore, no changes are planned to the Bill Data Tape in Ameritech Illinois.

Ameritech Illinois will continue to implement future BDT releases as appropriate.

Exchange Message Interface (EMI)

To provide consistency in the application of industry guidelines, Ameritech Illinois will provide the following enhancements:

- Implement changes resulting from a suite of resolved OBF issues that target the local market. The changes originating from the OBF issues that will be implemented in Ameritech Illinois are:
  010162 record – ISDN (Circuit Switch Digital)
  101019 record – Move of class features from 100118 to 100119
  OBF issue 1932 - UNE/P Access Header/Trailer/Detail/Summary records

- Provide a single user guide encompassing all 13 states. Details will be documented in that single SBC user guide.

- Increase notification period for planned EMI changes to sixty days.

The OBF Message Processing Committee maintains the Exchange Message Interface guideline which is used as the basis for providing billing network usage detail to CLECs. Version 17 of this guideline was issued in January 2000. The new EMI records to be implemented by Ameritech Illinois are fully described in OBF guidelines, and detailed specifications for the use of these records will be provided to CLECs in January 2001.

Approved OBF guidelines as appropriate will continue to be implemented by Ameritech Illinois.

Electronic Data Interchange (EDI)

Ameritech Illinois will begin using EDI 811, version 4010 Telecommunications Industry Forum guidelines, for creation of Resale bills. Use of the EDI 811 for this purpose is a commonly accepted industry practice, and the implementation will reflect the Ameritech Illinois paper bill format. This enhancement will be available in March 2001. TCIF/EDI guidelines for the EDI 811 transaction may be obtained from the TCIF web site. A detailed implementation guide describing the specifics of Ameritech Illinois' implementation of the EDI 811 will be available to CLECs in July 2000.

Ameritech Illinois also will provide a 30-day notification for monthly implementations and at least 90 days for version changes.

Online Viewing/GUI

There are no plans to create an on-line access capability for viewing bill images. Lack of current CLEC utilization in other regions of the SBC Toolbar application for billing, where available, and the absence of expressed interest during a prior CLEC collaborative billing forum suggest there is no business need for this capability.

G. Connectivity

In the Ameritech region, SBC will build a dedicated Remote Access Facility (to be called the ARAF) which will provide CLECs dedicated access to the application-to-application interfaces and Graphical User Interfaces being implemented in Ameritech Illinois. SBC will also provide Internet access for the Graphical User Interface being introduced in Ameritech Illinois.

The ARAF will use TCP/IP protocol and will be configured with: 1) routers capable of terminating private line or frame relay connections, and 2) access servers to terminate analog modem and ISDN dial-up connections. SBC will install and maintain these routers and will provide CLECs with specifications for the DSU/CSUs that are to be placed on both ends of the circuit. CLECs will provide their own circuit to the ARAF, the DSU/CSUs, as well as connectors and cabling from their CSU/DSU to the SBC router. Application-to-application interfaces will be accessible only via the CLEC's private line or frame relay connection to the ARAF and will not be accessible by a dial-up connection or the Internet.

Common security will be provided by SBC's firewall systems that will use access lists to authorize ARAF users access to designated OSS. Dial-up access users of the GUI interface(s) will pass though the same security methods as private line/frame relay users but must also authenticate upon connecting to the SBC access server by supplying a unique User ID and password pair to log onto the SBC network. When a CLEC wants to use Internet access, SBC will utilize Digital Certificates to secure access. Uniform GUIs can be accessed through either the ARAF or the Internet.

Documentation describing connectivity requirements and procedures for the ARAF will be standardized and made available to CLECs desiring connectivity to Ameritech Illinois OSS. As an example of this documentation, a guide for the existing SWBT region connectivity facility is attached (see Attachment J). Once the ARAF goes into production in the fourth quarter 2000, any CLEC wanting to establish connectivity for the first time or CLECs wanting to upgrade their existing connection, will be provided specifications for connecting to the dedicated ARAF facility. CLEC connections to any other facility within Ameritech Illinois will become grandfathered and no new CLEC connections will be made to such non-dedicated facilities.

Below is a list of items and functions regarding connectivity that will become the future method of operation in Ameritech Illinois for secured access to SBC's OSS.

- Dedicated CLEC Facility
- Private Line / Frame Relay connections
- Dial-up Connections
- SBC provides and maintains routers
- TCP/IP protocol used
- CLEC provides circuit, CSU/DSUs, connectors and cables
- CLEC provides publicly registered IP addresses for both ends of the private line or frame relay connection
- SBC installs and maintains CSU/DSUs at the SBC router
- Internet access (available for GUIs only) is secured by use of Digital Certificates
- Standard CLEC connectivity documentation
- Grandfather existing CLEC connectivity arrangements

In some cases, to make use of the Ameritech Illinois OSS interfaces via the ARAF, certain software requirements must be met by the accessing CLEC.

- For pre-ordering application to application EDI access, Interactive Agent software per the Electronic Commerce Implementation Committee (ECIC) Interactive Agent specification will be used. For the CORBA protocol, non-repudiation of EDI requests will not be supported and message receipts will be required. CORBA security will be in accordance with T1M1 T1.265 security specifications.

- The pre-ordering and/or ordering GUI will be accessed via browser software, such as Internet Explorer (version 4.0 or greater) or Netscape Navigator (version 4.0 or greater.) Communications will be secured with the Secure Socket Layer (SSL), X.509 digital certificates and individual user IDs and passwords.

H. Timeline

Ameritech Illinois FMO Timelines -- Release Schedule

Milestones	Availability Date
OSS Interfaces	
Use of Accessible Letter for Notification	
• **Implementation**	4/1/2000
Pre-ordering, Ordering, and Provisioning	
Pre-ordering Functionality Update	
• Release Announcement	12/16/1999
• Initial Release Requirements	1/14/2000
• CLEC Testing Start Date	3/18/2000
• **Implementation**	4/3/2000
DSL Loop Qualification	
• Release Announcement	12/16/1999
• Initial Release Requirements	1/14/2000
• **Implementation**	4/3/2000
Ordering Changes for DSL	
• Release Announcement	6/2000
• Initial Release Requirements	8/2000
• CLEC Testing Start Date	10/2000
• **Implementation**	12/2000
Updated Pre-ordering Application-to-Application Interface (Including Additional Provisioning Functions)	
• Release Announcement	9/2000
• Initial Release Requirements	11/2000
• CLEC Testing Start Date	1/2001
• **Implementation**	3/2001
Pre-ordering Graphical User Interface (GUI) (Including Additional Provisioning Functions)	
• Release Announcement	2/2001
• Release Requirements and User Guide Documentation	2/2001
• **Implementation**	3/2001
Ordering Graphical User Interface (GUI)	
• Release Announcement	2/2001
• Test Environment Access, Release Requirements and User Guide Documentation	2/2001
• **Implementation**	3/2001
Repair and Maintenance	
MLT EBTA and GUI Updates	

- Release Announcement 1/2000
- Initial Release Requirements 2/2000
- CLEC Testing Start Date Negotiated
- **Implementation** 4/3/2000

TRFD3 and History Window GUI Update

- Release Announcement 1/2000
- Release Requirements and User Guide Documentation 5/2000
- **Implementation** 6/2000

Billing

EMI Enhancements

- Final Release Requirements 1/2001
- **Implementation** 3/2001

EDI 811 Implementation

- Release Announcement 5/2000
- Initial Release Requirements 7/2000
- CLEC Testing Start Date 2/2001
- **Implementation** 3/2001

Connectivity

Ameritech RAF

- **Implementation** 12/2000

V. Glossary

2/6 Code	TIRKS "shorthand" abbreviation for Trunk Group
ACNA	Access Carrier Name Abbreviation
AEBS	Telcordia (formerly Bellcore) billing format standard.
Ameritech	The five-state operating region of SBC which encompasses the states of Illinois, Indiana, Michigan, Ohio and Wisconsin.
ANSI	American National Standards Institute
ARAF	The data communications facility that provides a secure network interface from CLEC networks to Ameritech's Data Communications Network (DCN).
ASC	Accredited Standards Committee - A designation for a industry body that has been given accreditation by the American National Standards Institute to issue ANSI standards. X12 and T1 are examples of such committees.
ASOG	Access Service Order Guidelines - The industry standard format documentation developed under the auspices of Ordering and Billing Forum (OBF) for the ordering of access services
ASR	Access Service Request - The industry standard format developed under the auspices of Ordering and Billing Forum (OBF) for the ordering of access services.
ATIS	Alliance for Telecommunications Industry Solutions
BDT	Bill Data Tape - Bill detail created in CABS which is predicated by the Billing Output Specifications (BOS) national standards.
BOS	Billing Output Specifications
CARE	Carrier Access Record Exchange
CCNA	Carrier Customer Name Abbreviation
CESAR - ISR	Customer's Enhanced System for Access Requests – Interconnection Service Request - Is a "gateway" for several applications. It is utilized in the PB/NB region for pre-ordering for Resale and Unbundled Loops, and ordering functions for Unbundled Loops, Local Number Portability, and Interconnection trunks.
CLEC	Competitive Local Exchange Carrier
CMIS	Certified Local Exchange Carrier Mechanized Interface Specification - A document created to aid CLECs in preparation of an LSR for ordering Unbundled Network Elements and Resale Services in the SNET region.
CMP	Change Management Process - Process negotiated between ILEC and CLECs to communicate changes made to the Operational Support Systems
Connect:Direct	A product of Sterling Commerce used to transport data files.
CORBA	Common Object Request Broker Architecture (CORBA) is an industry standard protocol for the mechanical exchange of data between computer systems.

CPO	Combined Platform Offering - An Ameritech unbundled network element platform (loop with port) offering.
DataGate	An SBC proprietary application to application interface for the mechanical exchange of pre-ordering information.
DSU/CSU	Data Service Unit/Channel Service Unit. The DSU part of the unit is the device used in digital transmission for connecting Data Terminal Equipment (DTE), such as a router, to Data Communications Equipment (DTE) or to a service. The CSU part of the unit is a digital interface device that connects end user equipment to the local digital telephone loop. (DTE) and data circuit termination equipment (DCE) for terminals
EBTA	Electronic Bonding Trouble Administration
ECIC	Electronic Communications Implementation Committee (ECIC) is an industry forum that develops a common understanding of electronics communications standards and develop guidelines for the implementation of electronic information exchange
EDI	Electronic Data Interchange - An industry standard protocol for the mechanical exchange of data between computer systems.
EMI	Exchange Message Interface - Usage record format for message exchange which is developed under the auspices of the Ordering and Billing Forum (OBF).
ESOG	Electronic Service Order Guide - A document created to aid CLECs in preparation of an LSR for ordering Unbundled Network Elements and Resale Services in the Ameritech region.
EXACT	Exchange Access Control and Tracking - The industry standard for ordering access services.
FMO	Future Method of Operation
FTP	File Transfer Protocol - A common industry defined data transmission polling protocol.
GUI	Graphical User Interface - A user-friendly presentation of data input screens.
GUI-Web	Web based GUI
ISO	International Standards Organization
ITU-T	International Telecommunications Union - Telecommunication
JIA	Joint Implementation Arrangement – arrangement between SBC and Application to application customers regarding implementation of mandatory and optional fields defined in T1M1.5 standard, as well as timing, security, measurements, etc.
LEC	Local Exchange Carrier
LEX	LSR Exchange - A GUI application available to CLECs for ordering LSR-based local services from SBC.
LRAF	The data communications facility that provides a secure network interface from CLEC networks to Southwestern Bell's Data Communications Network (DCN).

LSOG	Local Service Order Guidelines - The industry standard format documentation developed under the auspices of Ordering and Billing Forum (OBF) for the ordering of local service Resale, Number Portability, Unbundled Network Elements (UNE) Loops and Ports.
LSOR	A document created to aid CLECs in preparation of an LSR for ordering Unbundled Network Elements and Resale Services in the SWBT and PB/NB regions.
LSPOR	A document created to aid CLECs with pre-ordering inquiries to exchange certain information prior to the submission of an LSR for ordering Unbundled Network Elements and Resale Services in the SWBT and PB/NB regions.
LSR	Local Service Request - The industry standard format developed under the auspices of Ordering and Billing Forum (OBF) for the ordering of local service Resale, Number Portability, Unbundled Network Elements (UNE) Loops and Ports.
M&P	Methods and Procedures
MIB	Managed Information Base
NPA	Numbering Plan of North America
NXX	Local Exchange Number
OBF	Ordering and Billing Forum - The industry forum that develops the guidelines for ordering Wholesale Local and Access services.
OSS	Operation Support System
PB/NB	Pacific Bell/Nevada Bell - The two-state operating region of SBC which encompasses the states of California and Nevada.
PIC/LPIC	Primary Interexchange Carrier (PIC) and IntraLATA Primary Interexchange Carrier (LPIC) – Codes assigned to interexchange (long distance) and intraLATA (local) carriers
PMO	Present Method of Operation
PRAF	The data communications facility that provides a secure network interface from CLEC networks to the PB/NB Data Communications Network (DCN).
RAF	The Remote Access Facility is the regional access point available to CLECs for direct or dial-up connectivity to the SWBT and Facility
SBC	The corporate entity which encompasses the Ameritech, PB/NB, SNET and SWBT regions.
SNET	Southern New England Telephone - The SBC operating region which includes the state of Connecticut.
SRAF	The data communications facility that provides a secure network interface from CLEC networks to Southern New England Telephone's Data Communications Network (DCN).
SWBT	Southwestern Bell Telephone- The five-state operating region of SBC which encompasses the states of Arkansas, Kansas, Missouri, Oklahoma, and Texas.

T1M1	Industry standard body that develops inter-network operations standards and support the CORBA data model for pre-ordering.
TA	Trouble Administration
TCIF	Telecommunications Industry Forum - An industry standard body that produces the EDI mechanization specifications for the LSOG.
TCNet	A Web-based GUI available to CLECs that provides for the mechanical exchange of pre-ordering information.
TCP/IP	Transmission Control Protocol/Internet Protocol
TRFD3	Trouble Report Format Definition
UNE	Unbundled Network Element
USOC	Universal Service Order Code - The industry standard ordering codes associated with products and assigned by the Universal Service Order Standards at Telcordia.
Verigate	A GUI available to CLECs that provides for the mechanical exchange of pre-ordering information.
W-CIWin	Wholesale Customer Information Window - An SNET proprietary system that facilitates Resale and UNE order processing by enabling integrated access to the operational support systems.
WSM	Wholesale Service Manager - An Operational Support System that provides ordering and flow through capability and data element validation for Resale services.
X.25	Developed by the ITU-T as an interface between data terminal operating in the packet mode on public data networks

Attachment A – Change Management Process

Attachment B – April 2000 Pre-ordering Update Specifications

Attachment C – Verigate User Guide

Attachment D – April 2000 Loop Qualification Pre-ordering Transaction Specifications

Attachment E – LEX User Guide

Attachment F – OS User Guide

Attachment G – POS User Guide

Attachment H – DataGate Order Status and Provisioning Order Status Transaction Specifications

Attachment I – EBTA MLT Enhancement Specifications